

## Peer Pressure and Tobacco Smoking among Undergraduate Students of the University of Calabar, Cross River State

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### Abstract

Peer pressure becomes a perturbing and problematic phenomenon as children grow seeing their peers as role model. Peer pressure is a social institution that modifies adolescents' behaviours by making them indulge in risky behaviour such as smoking as early age. This phenomenon has indeed found its way into our tertiary institutions and among our youths who are leaders of tomorrow. This study examined peer pressure and tobacco smoking among undergraduate students of the University of Calabar, Nigeria. Data were obtained through the administration of a structured questionnaire to one hundred and twenty respondents in two well known and patronized restaurants and bars directly opposite the University of Calabar 'small gate. Result indicated that 46 per cent of tobacco use among undergraduate students were accounted for by peer pressure, while the ANOVA result indicated that peer pressure had significant influence on undergraduate students' tobacco use ( $F=4.069$ ,  $p<0.05$ ); the model further revealed that a unit increase in peer influence factor would result in 62% unit rise in the percentage of undergraduates that make use of tobacco substance. Result of independent samples test showed that the frequency of tobacco use differs between sexes ( $t=3.100$ ,  $p<0.05$ ). This study therefore revealed that the frequency of tobacco use among undergraduate student in Nigeria's university environment was in the increase. In order to reduce this phenomenon which indeed has found its way into our campuses, the study suggested among other measures the implementation of programmes that will integrate concerned authorities in order to reduce the number of adolescent smokers and realize the vision of better health for Nigerian youths who are leaders of tomorrow by the year 2020.

**Keywords:** peer pressure, tobacco use, frequency of tobacco use, pattern of smoking, undergraduate students, tobacco initiation/development

### 1. Introduction

Peer pressure is a phenomenon that exists for all ages. In Nigeria, the phenomenon indicates high prevalence of tobacco use (Adeyemo, 2007). It perhaps becomes perturbing and problematic as children grow seeing their peers as role model. Peer directly or indirectly influences adolescents to indulge in risky behaviour such as smoking. Direct peer pressure according to Conrad et al. (1992) "may occur in the form of encouragement, dares, or actual offers of the substances". On the other hand, "indirect peer influences can occur when youth associate with peers who drink or smoke, increasing the availability of these substances, providing role models, establishing substance use as normative, and creating the perception that using these substances might increase social acceptance" (Conrad, Flay and Hill, 1992). Peer groups gives comfort to children, as it facilitates self-esteem in children and makes acceptable. Adolescents tend to settle with friends of similar problem and situation and where they know their conditions will be accepted (Kendal, 1985; Urberg, Luo, Pilgrim and Degirmencioglu, 2003). According to Kim, Kwak and Yun, (2010), "the feeling of belonging is a very powerful force that can outweigh ties to church, school, family, or community".

Tobacco use if addictive can cause several health disorders such as cancer, heart disease and respiratory disease among others. Indeed, constant substance use causes morbidity, health and social problems. According to Morello, Duggan, Adger, Anthony and Joffe (2001), "tobacco use has medical, psychological and social implications and can be, for many students, the beginning of a course that leads to substance dependence". University students' encounter many challenges as a result of tobacco use. University students make use of cigarettes for various reasons among which are to relieve stress and to raise their morale. Tobacco use normally

starts during adolescence, and majority of the first time use takes place before graduation from high school. Substance use among adolescents in tertiary institution is unacceptably high; this may have health implications on adolescents as they grow old.

Most student smokers' on campus and elsewhere constitute persons that snub normal moral values set by the family and society, but are happy to obey and conform strictly to the values of their peer group. Peer exerts negative attitudes among adolescents and individuals by challenging them to prove their manhood through performing a risky stunt such as smoking. As such both girls and boys are made to indulge in risky behaviours they ordinarily they would not have taken, but taking such risky behaviour is the only way of assuring their acceptance. By so doing, they become addictive to such behaviour with inherent consequences on their personal well being and health. Peer groups exert much influence on adolescents, and no matter how inappropriate their mode of operation may look to adults, being a part of the group gives something momentous to the young person. The acceptance and practice of risky behaviours like smoking among smokers can be traced back to their teens and the kind of moral principles accepted by the peer group. This is so as peer groups provide comfort and self-esteem to adolescents. It is indeed worthy to say that most of the current smokers on campus are individuals encouraged to make use of different tobacco products by friends they make on campus, and accepting to smoke is seen as a bond to their friendship. This incidence is problematic due to the short and long-term effects such unhealthy behaviour would have on the student's cognitive development and personal life during their academic pursuits and after graduation.

In Nigeria, there are evidences of tobacco use on road verges, motor parks as well as restaurants, bars and hangouts where adolescents converge on daily basis to use tobacco and indulge in binge drinking. Fatiregun and Yisa (2009) study conducted in Ibadan in the South-West part of Nigeria "discovered that only 6.3 percent and 10.6 percent of the respondents who are students in military secondary schools show positive attitude towards acceptance of substance". Aina and Olorunshola (2008) in their study "found an increasing trend in substance use among adolescents and young adults. They observed that a factor responsible for this increase may be attributable to the way substance use is being portrayed in local films and videos, which they found runs counter to the tenets of Public Drug Education". Also, Makanjuola, Daramola and Obembe (2007) "found substance use to be increasingly widespread in many African countries. According to them, substantial percentage of national budgetary health allocation is utilized for treatment and rehabilitation of people with substance use problems. This is attributed to industrialization, urbanization and increased exposure to Western lifestyle. Other reasons given by them include: unhealthy family background, high social class, peer-group influence, and desire to remain awake at night, pressure to succeed in academic work, self-reported poor mental health and easy accessibility of drugs". Earlier studies on the peer influence and tobacco use in Nigeria and elsewhere identify peer pressure as one of the commonest factors associated with substance use among adolescent. For example, Adebisi, Faseru, Sangowawa and Owoaje (2010) "studied tobacco use amongst out of school adolescents in a Local Government Area in Nigeria. The study showed that peer influence is an important source of introduction to tobacco use while selling of tobacco to adolescents in youth aggregation areas is common".

Oshodi, Aina and Onajole (2010) "studied the prevalence and associated factors of substance use among selected secondary school students in Lagos. Result obtained show that reasons for alcohol and substance uses included relief from stress self medication to treat illness and to stay awake at night to study". Omokhodion and Faseru (2007) assert that "although studies examining smoking among youths have been documented in Nigeria, these are skewed towards describing pattern of use amongst in school youths in urban areas". Omokhodion and Faseru further submit that "many of the factors associated with adverse health behaviors which may include smoking initiation and persistence are known to be commoner amongst out-of-school youth because of their aggregation in areas lacking adult supervision. The term "out-of-school youth" is used to define several groups of young people: those who have dropped out of school, those who never attended school, or those who participate in non formal school programs. These youths are a diverse group who may have completed elementary school (but lack basic skills to progress to high school or vocational training), dropped out or never started school". Furthermore, Kim et al. (2010) "investigated the effects of peer association and parental influence on adolescent substance use in South Korea. The findings supported both social learning theory and social bonding theory, suggesting that both peer and parental influence are significant in predicting the risks of adolescent substance use and that parental influence was slightly greater than peer factors, although the difference was negligible".

Akers and Sellers (2004) contended that "in the United States, peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argued that peer influence has strong direct effects on adolescent substance use, superior to parental attachment". In New Zealand, Fergusson, Swain-Campbell and Horwood (2002) "assessed deviant peer influence on adolescent illegal behaviours and substance use. The study

found a significant impact of deviant peers on both psychosocial and criminal outcomes, such as violent crime, property crime, and alcohol and other drug abuse". In a study conducted with an Austrian youth sample, Rumpold, Klingseis, Dornauer, Kopp, Doering and Hofer (2006) found that "peer group influence was particularly associated with adolescent substance and drug use, as compared to variables reflecting negative family atmosphere, school difficulties, and other individual factors". Kwamanga, Odhiambo and Amukoye (2003) "examined the prevalence and risk factors of smoking among secondary school students in Nairobi. Results indicated peer pressure, advertising, type of school and age influenced smoking among the students". Similarly, Franca, Dautzenberg, Falissard and Reynaud (2010) "studied peer substance use overestimation among French university students; the result obtained showed that tobacco users are less likely to overestimate peer prevalence of smoking". A cursory look at the results of these studies reveals that peer influence if not properly handled and checked may affect the future life styles of adolescents. The available studies also show that Calabar, one of the tourism hotspots in Nigeria accompanied with the influx of people into the state for leisure, trade, education among other motives has not received much research attention in relation to tobacco use among her youths. The objective of this study was to examine peer pressure and tobacco smoking among undergraduate students of the University of Calabar, Cross River State. The study is guided with the hypotheses that:

- i. There is significant difference in the frequency of tobacco use between sexes.
- ii. Peer pressure has significant influence on undergraduate students' tobacco use.

## 2. Theoretical Construct

This study anchors firmly on the social learning theory. The theory sees family and peer relationships to exert significant influence on adolescent alcohol use as they constitute the primary institutions where good morals are learned. The theory postulates that "an individual learns to take alcohol or drugs in small and informal groups" (Bahr, Marcos and Maughan, 2005; Akers and Sellers, 2004). Indeed, it is in these formal groups that adolescents taught favourable or unfavourable behaviour of alcohol use (Akers and Jensen, 2005). The main principle remains that the learning process may conform to societal ethic or show deviant behaviour. The theory therefore tells us how good and bad behaviours are learned and the major players influencing any of the behaviours. Akers (1998) opined that the social learning theory "is not solely a "positivistic" theory of the causes of crime, addressing only "why they do it" and incapable of explaining "why they do not". Akers and Sellers (2004) in buttressing the relevance of this theory argued that "the concepts, propositions, and variables in social learning theory have been presented in published form in great detail over the past forty years, is well known in the classroom and widely cited in the literature".

The focus of many social learning theorists is on peers as a result of the importance children or adolescents place on their friends as they grow into adulthoods and gradually gain freedom from their parents. The experimental effectiveness of this theory is supported by several empirical research work in the literature (Akers and Sellers, 2004; Bahr et al., 2005), as such, it has a far reaching impact on the lifestyle of adolescents. This theory indeed constitutes a powerful stream for research on peers as a source of influence and support for smoking behaviour. For example, Mosbach and Leventhal (1988) revealed that "cigarette smoking was the best discriminator of social group affiliations". Adebisi et al. (2010) in their study showed that "peer influence is an important source of introduction to tobacco use", while Kim et al. (2010) noted that "both peer and parental influence are significant in predicting the risks of adolescent substance use". The implication of this theory to the present study is that peer influence increases during adolescence and have vital effects on their attitudes and behaviours, mostly on the current incidence of tobacco use among undergraduate students in tertiary institutions. It is not uncommon to find most students displaying deviant behaviours different from what is learnt at home immediately they begin to gain freedom. Students who do not smoke or take tobacco in their homes are influenced to do so by peers as sign of maturity and awareness. Exposure to deviant attitudes and behaviours increases the likelihood that individuals will hold such attitudes for themselves. It is no news that some students while with their parents tend to be innocent and decent in their act, but immediately they leave their homes to school where they meet with friends; exhibit all forms of risky behaviours such as tobacco smoking.

## 3. Materials and Methods

### 3.1 Research Design

The descriptive cross sectional research design was used because it covered students from different culture and socioeconomic background. Through this, the responses of respondents towards peer pressure and the tendency of tobacco use were measured through the use of a structured questionnaire.

### 3.1.1 Sample Size

Since, there is no available data on the population of smokers on campus, a supposed representative sample of one hundred and twenty smokers (both males and females) were purposively determined and sampled from two highly patronized restaurants and bars opposite “small gate” of the University of Calabar which include Jeran and faculty of enjoyment. In each of these restaurants and bars, 60 smokers (basically students of 100 to 500 levels) were sampled. This number was also chosen due to the population of smokers usually found at the two restaurants and bars as well as the information gathered from the managers concerning patronage per day. These study sites offer varying services that attract patronage from students, such as printing, photocopying, canteen among others. One hundred and twenty smokers across different socioeconomic background was the sample size used for data collection.

### 3.1.2 Sampling Technique

This study made use of the purposive and accidental sampling techniques. The purposive sampling technique was used to select two well known and patronized restaurants and bars directly opposite “small gate” of the University of Calabar, the restaurants and bars were Jeran and faculty of enjoyment. In each location, 60 students (both males and females of 100 to 500 levels) were sampled and administered questionnaire using accidental sampling technique. This was used because it was not possible to meet students who smoke at the spot; as such only students found smoking at the time of visit were administered questionnaire. In order to ensure complete administration several visits were paid to the selected outlets where smokers’ meet with their peers.

### 3.2 Methods of Data Collection

The researcher in order to collect data for the study visited the two places mentioned and the research instrument (questionnaire) was self administered to smokers after approval had been gotten from them. In line with the instructions on the instrument, the questionnaire was answered and returned. Respondents were asked to instantly fill the instrument. The questionnaire contained questions in relation to the study objectives. The research instrument was categorized into three parts. Part A had a set of questioned designed to measured socio-economic characteristics of respondents; Section B contained questions designed to measure smokers’ tobacco use as well as peer pressure on tobacco use, while Section C contained some set of questions designed to examine smokers’ perception on peer pressure as a correlate to tobacco use as well as their perception on tobacco using a four point Likert Scale with responses ranging from strongly agree (SA) to strongly disagree (DS).

### 3.3 Methods of Data Analysis

Data obtained from the questionnaire were analysed using tables, simple percentages, independent samples test and bivariate regression. In order to effectively carryout inferential analysis, the item on frequency of tobacco use coded for descriptive analysis with five options was transformed into two dummy variables of frequent consumption (comprising of daily, weekly and 3–4 times) as 2 and seldom consumption (comprising of once a month and occasionally) as 1. Sexes of respondents with two options were transformed into one dummy variable of male as 1 and female as 0. Statistical computation was done with the aid of SPSS 17.0 for Windows.

## 4. Results and Discussion

### 4.1 Socio-demographic Characteristics of Respondents

The socio-demographic characteristic of respondents’ reveals that out of the respondents that correctly answered the questionnaire, 59.2% were males, while 40.8% were females. This implies that the tobacco use is higher in males than females due to its acceptability and use among males (Lim et al., 2006). Information on the ages of respondents depicts that 69.2% were within the ages of 18-25 years; 25% of the respondents were within the ages of 26-35 years, while 5.8% are respondents within the ages of 36-45 years. This implies that tobacco use is common among youth/students within the ages of 18-25 years. This result somehow agrees with earlier studies like those of Kwamanga et al. (2003) that “experimentation with smoking started at five years and regular smoking at 10 years but majority of students (72.2%) mostly males started at between age 12 and 16 years”. Information on the age of tobacco use shows that majority of the respondents precisely 84.2% started using tobacco between the ages of 11 and 22 years, while 15.8% of the respondents started smoking between the ages of 23 and 25 years. Some of these smokers asserted they started smoking back in high school, precisely in SS 2. This implies that tobacco use is common among youth/students within the ages of 18-25 years. This result somehow agrees with earlier studies like those of Kwamanga et al. (2003).

#### 4.2 Incidence of Tobacco Use and Initiation into Use

Table 1. Respondents' account of initiation into tobacco use

| Determinant of tobacco use | Frequency  | Percent      |
|----------------------------|------------|--------------|
| Parent                     | 1          | 0.8          |
| Relatives                  | 11         | 9.2          |
| Friends                    | 92         | 76.7         |
| Brothers/sisters           | 16         | 13.3         |
| <b>Total</b>               | <b>120</b> | <b>100.0</b> |

$X^2=174.733$ ;  $DF=3$ ; 5% significance level

Table 1 examines the incidence of tobacco use and how respondents get initiated into tobacco use. Information in the table reveals all the respondents had used tobacco for various reasons and at different occasions, However, out of the respondents that had used tobacco (76.7%) were introduced or initiated into tobacco use by their friends, while (9.2%) were introduced into tobacco use by their relatives (cousins, nieces, aunts and uncles), 13.3% were initiated by brothers/sisters. This indicates that majority of the respondents are introduced into tobacco use by their peers/friends. The result of Chi Square (table 1) shows that the use of tobacco by adolescents is significantly determined by the mode of initiation ( $X^2=174.733$ ,  $p<0.05$ ). In the same manner, Akers and Sellers (2004) contend that "overall, peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argue that peer influence has strong direct effects on adolescent substance use, superior to parental attachment. Supporting this proposition, empirical research evidence verifies the importance of peer association and delinquent peer influence over the importance of parental influence".

#### 4.3 Frequency of Tobacco Use

Table 2. Respondents' incidence of tobacco use

| Frequency of tobacco use | Frequency  | Percent      |
|--------------------------|------------|--------------|
| Daily/everyday           | 67         | 55.8         |
| Once a week              | 14         | 11.7         |
| 3 - 4 times a week       | 13         | 10.8         |
| Once a month             | 1          | 0.8          |
| Occasionally             | 25         | 20.8         |
| <b>Total</b>             | <b>120</b> | <b>100.0</b> |

Table 2 indicates that 55.8% of the respondents used tobacco daily/everyday, which shows that this category of people are probably tobacco addicts who do not feel fine without substance use. 20.8% of the respondents occasionally made use of tobacco, probably during stress and to feel high or to be bold; 11.7% and 10.8% use tobacco once a weekly and 3-4 times a week. These groups of individuals are non-tobacco addicts or devotees who smoke at will; only a negligible percentage (0.8%) took tobacco monthly. The information however implies that students (respondents) use tobacco daily and weekly mostly to reduce stress and for boldness. This again corroborates the study by Oshodi et al. (2010) that the "reasons for alcohol and substance uses among adolescents include relief from stress, self medication to treat illness and to stay awake at night to study".

#### 4.4 Pattern of Tobacco Use

Table 3. Respondents' pattern of tobacco use

| Pattern of tobacco use       | Frequency  | Percent      |
|------------------------------|------------|--------------|
| Smoking alone                | 78         | 65.0         |
| Smoking + chewing            | 7          | 5.8          |
| Smoking + drinking           | 26         | 21.7         |
| Smoking + chewing + drinking | 9          | 7.5          |
| <b>Total</b>                 | <b>120</b> | <b>100.0</b> |

$X^2=149.348$ ;  $DF=12$ ; 5% significance level

Table 3 gives information on the pattern of tobacco use. The table indicates that out of the 55 respondents that used tobacco daily, 85.5% smoke it only, while 14.5% did not use it alone but complement it with drink. Out of the 14 11.7% that used tobacco once a week, every smoker (100%) smoked only. Out of the 30.8% of the respondents that used tobacco occasionally, 70.3% smoked and drank, 24.3% smoked, chewed and drank simultaneously, while 5.4% smoked and chewed the substance. This therefore means that majority of the respondents (58.3%) used tobacco alone, while 28.3% smoked and drank concurrently. The chi square result implies that frequency and pattern of tobacco use varies significantly among tobacco users ( $X^2=208.523$ ;  $p<0.05$ ). The pattern of tobacco use conforms with Palo et al. (2008) study that among total substance abusers 19 (11.4%) only smoke cigarette, 21 (12.6%) take only alcohol, 35 (21.1%) only chew tobacco, 20 (12.1%) take both alcohol & smoke, 16 (9.6%) take alcohol & chew tobacco, 26 (15.7%) smoke & chew tobacco and 29 (17.5%) take in all the 3 forms (i.e. smoke + alcohol + chewing tobacco).

#### 4.5 Analysis of the Frequency of Tobacco Use between Sexes

Table 4. Independent samples test of difference in frequency of tobacco use

| Variables                         | N  | Mean | SD   | t-cal  | Sig   | df  |
|-----------------------------------|----|------|------|--------|-------|-----|
| Males' frequency of tobacco use   | 71 | 1.39 | 0.49 |        |       | 118 |
| Females' frequency of tobacco use | 49 | 1.67 | 0.47 | 3.100* | 0.002 |     |

\*Difference between means is significant at 5% alpha level

Source: SPSS Window Output Version 17.0

The hypothesis that there is significant difference in the frequency of tobacco use between sexes was tested using independent samples test. Result obtained is shown in table 4. The result shows that calculated t-value of 3.100 is bigger than the probability value of 0.002 or table t-value of 1.980 at 5% significance level under 118 degree of freedom; with this, the hypothesis that there is significant difference in the frequency of tobacco use between sexes was accepted. This therefore means that frequency of tobacco use differs significantly between sexes. This indeed is apparent as there is higher frequency of tobacco use in males than females, males are more exposed to risk and situations that make that use tobacco as a depressant or stimulant when under intense condition or stress. Conventionally, the prevalence of tobacco use and abuse is more widespread among males than females; a visit to drinking bars or restraints will clearly show that out of 10 smokers that will be encountered, either one or none will be female. This therefore implies that tobacco use is more prevalent among males than females. This result agrees with the findings of Adebisi et al., (2010) when they observed in their study of tobacco use that "males accounted for 60% of current tobacco users compared to 40% amongst females".

#### 4.6 Development of Smoking Habit

Table 5. Respondents' tobacco use and development of smoking habit

| Habit of smoking             | Frequency  | Percent      |
|------------------------------|------------|--------------|
| Attachment to peers          | 67         | 55.8         |
| Influence of older siblings  | 14         | 11.7         |
| Watching adult smoke         | 3          | 2.5          |
| Personal desire and practice | 30         | 25.0         |
| Others                       | 6          | 5.0          |
| <b>Total</b>                 | <b>120</b> | <b>100.0</b> |

Factors facilitating respondents' interest in tobacco use is depicted in table 5. It shows that 45.8% respondents that used tobacco daily developed the habit as a result of their attachment with peers, for those that used tobacco substance once a week, 14.3% were lured into it by older siblings, while 85.7% developed the habit of smoking through the attachment to peers. In addition, those that used tobacco occasionally, 81.1% were borne out of personal desire and practice, 2.7% was lured into smoking by watching adult smoke. In summary, information on table 5 indicates that respondents' smoking habits are influenced by attachment to peers. This finding agree with those of Lim et al. (2006) that the "prevalence and factors related to smoking among secondary school students and observed that smoking was associated with having a brother or friend who smokes".

#### 4.7 Perception of Peer Pressure as a Correlate to Tobacco Use

Table 6. Respondents' perception on peer pressure as a correlate to tobacco use

| Perception of tobacco use   | SA            | A             | D            | SD           |
|---|---------------|---------------|--------------|--------------|
| Peer pressure influences smokers' tobacco use                                 | 86<br>(71.7)  | 31<br>(25.8)  | 3<br>(2.5)   | 0<br>(0)     |
| Peer factor is not a strong predictor of substance use among students smokers | 16<br>(13.3)  | 59<br>(49.2)  | 28<br>(23.3) | 17<br>(14.2) |
| Pressure to be accepted by my peer indulge people into smoking                | 56<br>(46.7)  | 48<br>(40)    | 10<br>(8.3)  | 6<br>(5)     |
| Peer influence of tobacco use is more influential than parental influence     | 68<br>(56.7)  | 43<br>(35.8)  | 6<br>(5)     | 3<br>(2.5)   |
| <b>Total</b>  | <b>57</b>     | <b>45</b>     | <b>12</b>    | <b>6</b>     |
| <b>%</b>  | <b>(47.5)</b> | <b>(37.5)</b> | <b>(10)</b>  | <b>(5)</b>   |

Values in bracket are percentages

The perceptions of smokers as well as non smokers on peer pressure as a correlate to tobacco use is presented in table 6; the table shows that 97.5% of the respondents strongly affirmed that peer pressure influences smokers' tobacco use, while 2.5% did not think peer pressure is responsible for smokers' tobacco use. This indeed implies again that tobacco use among students or adolescents is influence by attachment to peers. According to Akers and Sellers (2004), "peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argue that peer influence has strong direct effects on adolescent substance use, superior to parental attachment". In addition, 62.5% asserted that peer pressure is not a strong predictor of tobacco use, while 37.5% strongly opposed the assertion, to them peer factor is a strong predictor of smokers' substance use. Also, 92.5% of the respondents strongly submitted that peer influence of tobacco use is more influential than parental influence, while 7.5% did not think in similar way, to them, parental influence is more significant. The

information in the table indicates that 85% of smokers' tobacco use is influenced by peer pressure. This result affirms the result of Kendal (1985) that "peer influence was more important than the parental influence". Also, Allen et al. (2003) observed in their study that "peers, siblings, and friends were more influential predicting factors on substance use than parents".

#### 4.8 Analysis of the Influence of Peer on Tobacco Use among Undergraduate Students

Table 7. Summary of bivariate regression result of peer pressure on tobacco use

| Variables           | Coefficients |         |         |
|---------------------|--------------|---------|---------|
|                     | b            | $\beta$ | t-value |
| Peer pressure       | 0.62         | 0.28    | 2.017*  |
| <b>Test results</b> |              |         |         |
| F- value            | 4.069*       |         |         |
| R                   | 0.68         |         |         |
| R <sup>2</sup>      | 0.46         |         |         |
| Constant            | 2.474        |         | 5.722*  |
| DF                  | 1/118        |         |         |
| Table F-value       | 3.92         |         |         |

\*Significant at 5% significance level

Source: SPSS Window Output Version 17.0

The hypothesis that peer pressure has significant influence on undergraduate students' tobacco use was tested using bivariate regression. Result obtained is shown in tables 7. The result in table 6 shows there was a high correlation (0.68) between peer pressure and tobacco use. The coefficient of determination ( $R^2$ ) indicates that 46 per cent of tobacco use among undergraduate students was accounted for by peer pressure. The ANOVA result indicates that tobacco use was significantly influenced by peer pressure. This decision is consequent upon the calculated Fisher-ratio of 4.069 being bigger than the tabulated Fisher-value of 3.92 at 5% significance level under 1/118 degrees of freedom (Table 7); with this, the hypothesis that peer pressure has significant influence on undergraduate students' tobacco use was accepted. This implies that tobacco use is significantly influenced by peer pressure. This shows in relation to the high association between peer pressure and tobacco use, indicated that peer pressure exerted significant influence on smokers' tobacco use directly or indirectly. Indeed, peer pressure is one the commonest factor associated with adolescent tobacco use. The result and assertion above agrees with the study of Flay and Miller (1995) that "both girls and boy are inclined to take risks they do not want to take because they believe the risky behaviour (smoking) will increase their standing in the eyes of their peers and assure their acceptance in the group". Hawkins et al. (1992) also contend that "peer groups have so much influence, especially with adolescents, because, no matter how inappropriate it seems to adults, belonging to a group really does give something significant to the young person".

Furthermore, the significance of the predictor variable (peer pressure) in influencing smokers' tobacco shows that peer pressure exerted significantly effect on smokers' tobacco use ( $t=2.017$ ,  $p<0.05$ ). This means that peer pressure directly influences smokers' tobacco use, as an increase in peer pressure would have a resultant effect on adolescents' tobacco use. The strength of contribution of peer pressure to the increase in tobacco use shows that a unit increase in peer pressure will result in 0.62 or 62 per cent unit increase in the number of undergraduates using tobacco substance. This again corroborates the report by Akers and Sellers (2004) that "peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argue that peer influence has strong direct effects on adolescent substance use, superior to parental attachment".

#### 4.9 Result Analysis

This analyzed result reveals that adolescents are exposed to tobacco substances at an early age. This finding agrees with those of Hotton and Haans (2004) and Oshodi et al. (2010) when they report that "in general, drinking to intoxication and tobacco use were more common among 14 and 15 years". The analysis indicates

that majority of the respondents are introduced into tobacco use by their peers/friends and their relatives (cousins, nieces, aunts and uncles). Akers and Sellers (2004) contend that “overall, peer factors seem to be a stronger predictor of adolescent substance use than parental influence. They argue that peer influence has strong direct effects on adolescent substance use, superior to parental attachment”. The study reveals that students (respondents) use tobacco daily and weekly mostly to reduce stress and for boldness. This again corroborates the study by Oshodi et al. (2010) that “the reasons for alcohol and substance uses among adolescents include relief from stress, self medication to treat illness and to stay awake at night to study”. For every 55 individuals who use tobacco daily, 47 smoke it only, while 8 complement it with a bottle or bottles of drink. Majority of adolescents use tobacco alone, while a small number smokes and drinks concurrently. The frequency of tobacco use differs significantly between sexes (males and females). This is evidently true as the habit of smoking is taken as a usual behaviour among males (Lim *et al.*, 2006), also because males are more exposed to risk and situations that make that use tobacco as a depressant or stimulant when under intense condition or stress. This result agrees with the findings of Adebisi et al., (2010) when they observed in their study of tobacco use that “males accounted for 60% of current tobacco users compared to 40% amongst females”. In addition, the pattern of tobacco use conforms with Palo et al. (2008) study that among total substance abusers 19 (11.4%) only smoke cigarette, 21 (12.6%) take only alcohol, 35 (21.1%) only chew tobacco, 20 (12.1%) take both alcohol & smoke, 16 (9.6%) take alcohol & chew tobacco, 26 (15.7%) smoke & chew tobacco and 29 (17.5%) take in all the 3 forms (i.e. smoke + alcohol + chewing tobacco).

However, on peer influence on tobacco use, the study indicates that 85% of tobacco use is influenced by peer pressure. This affirms the result of Kendal (1985) that “peer influence was more important than the parental influence”. The study therefore reveals that peer pressure exerts significant influence on adolescents tobacco use. This is linked to adolescent substance use as peer groups directly and indirectly forces adolescents to smoke. Instances of direct peer pressure include encouragement to make use of tobacco, while indirect peer influences occurs when adolescents see their peers as role models and the use of tobacco may increase their acceptance. This lend supports to Hawkins et al., (1992) submission that that “peer groups have so much influence, especially with adolescents, because, no matter how inappropriate it seems to adults, belonging to a group really does give something significant to the young person”.

## 5. Conclusion and Recommendations

This study has shown that frequency of tobacco use among undergraduate student of the University of Calabar like in other campus in Nigerian Universities is in the steady increase and there is dire need to tackle this social vice which is eating very deep into the Nigeria’s university environment. Globally, tobacco smoking is the one of the leading causes of deaths annually. However, in order to understand why adolescents are more susceptible to peer pressure, it is imperative to come up with prevention programmes that will help reduce the incidence of substance use. For this to be feasible, preventive programmes involving stakeholders must be instituted in order to reduce the number of adolescent smokers and realize the vision of better health for Nigerian youths who are leaders of tomorrow by the year 2020. In addition, parents should make it as a matter of priority to explore the family background, private activities and friendship selection of their children. This will help to guide their children on the right friends to make as well as detect risky behaviour.

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